

WHAT IS CLAIMED IS:

1. A connection management apparatus connectable via a communication apparatus to both a first terminal and a second terminal, comprising:

    a transmission/reception unit connectable to said communication network;

    a CPU connected to said communication network; and

    a memory connected to said transmission/reception unit and further connected to said CPU; wherein:

        in the case that a connection request issued from said first terminal to said second terminal is received by said transmission/reception unit, said CPU reads out a program for judging as to whether or not a connection can be established from said first terminal to said second terminal from said memory and then executes said read program; and

        in the case that said connection cannot be established as a result of said judgement, said CPU furthermore reads out a program for generating an address by which said first terminal is connectable to said second terminal from said memory and then executes said read program so as to transmit data containing said generated address from said transmission/reception unit to said first terminal.

2. A connection management apparatus as claimed in claim 1 wherein:

a database for judging as to whether or not the connection from the first terminal to the second terminal can be established has been stored in the memory; and

    said CPU executes said judgement by employing said database.

3.       A connection management apparatus as claimed in claim 1 wherein:

    in the case that said connection cannot be established as a result of said judgement, said CPU further reads out a program for retrieving a communication path from said first terminal to said second terminal from said memory and then executes said read program; and

    in the case that said communication path is present as a result of said retrieving operation, said CPU executes the program for generating said address.

4.       A connection management apparatus as claimed in claim 1 wherein:

    in the case that said connection cannot be established as a result of said judgement, the CPU notifies such a fact to said first terminal; and furthermore, the CPU generates said address after a request has been issued from said first terminal.

5.       A connection management apparatus as claimed in claim 1 wherein:

    in the case that said connection can be established as a result of the judgement, said CPU

further reads out a program for authenticating said first terminal from said memory and then executes said read program; and generates said address after authentication of said first terminal is succeeded.

6. A connection control system connected via a communication network to both a first terminal and a second terminal, comprising:

a connection control apparatus and an address generation apparatus, each of which is comprised of: a transmission/reception unit connected to said communication network; a CPU connected to said communication network; and a memory connected to said transmission/reception unit and further connected to said CPU; wherein:

in said connection control apparatus, in such a case that a connection request issued from said first terminal to said second terminal is received by said transmission/reception unit of said connection control apparatus reads out a program for judging as to whether or not a connection can be established from said first terminal to said second terminal from said memory and then executes said read program; and

in such a case that said connection cannot be established as a result of said judgement, said CPU of said connection control apparatus transmits a generation request for generating an address by which said first terminal can be connected to said second terminal from said transmission/reception unit of said

connection control apparatus; and wherein:

in said address generation apparatus, the transmission/reception unit of said address generation apparatus receives said generation request for generating said address;

the CPU of said address generation apparatus reads out a program for generating an address by which said first terminal can be connected to said second terminal from said memory of the address generation apparatus and then executes said read program; and said CPU of the address generation apparatus transmits data containing said generated address from the transmission/reception unit of said address generation apparatus to said first terminal.

7. A connection control system as claimed in claim 5 wherein:

in such a case that said connection cannot be established as a result of said judgement made in said connection control apparatus, said CPU of said connection control apparatus further reads out a program for retrieving a communication path from said first terminal to said second terminal from said memory of the connection control apparatus and then executes said read program; and

in such a case that said communication path is present as a result of said retrieving operation, the CPU of the connection control apparatus transmits a request for generating an address by which said first

terminal can be connected to said second terminal from the transmission/reception unit of said connection control apparatus to said address generation apparatus.

8. A connection control system as claimed in claim 6 wherein:

in the case that said connection cannot be established as a result of said judgement made in the connection control apparatus, said address generation apparatus generates said address after a request has been issued from said first terminal.

9. A connection control system as claim in claim 6 wherein:

said connection control system is further comprised of:

an authentication apparatus equipped with a transmission/reception unit connected to said communication network; a CPU connected to said communication network; and a memory connected to said transmission/reception unit and further connected to said CPU; wherein:

in such a case that said connection can be established as a result of judgement made in said connection control apparatus, the CPU of said authentication apparatus reads out a program for authenticating said first terminal from the memory of said authentication apparatus and then executes the read program; and further,

said address generation apparatus generates

said address after said authentication apparatus succeeds in authentication of said first terminal.

10. A connection control apparatus connected via a communication network to a first terminal, a second terminal, and an address generation apparatus, comprising:

a transmission/reception unit connected to said communication network;

a CPU connected to said communication network; and

a memory connected to said transmission/reception unit and further connected to said CPU; wherein:

in such a case that a connection request issued from said first terminal to said second terminal is received by said transmission/reception unit, said CPU reads out a program for judging as to whether or not a connection can be established from said first terminal to said second terminal from said memory and then executes said read program; and

in such a case that said connection cannot be established as a result of said judgement, said CPU transmits a request for generating an address by which said first terminal can be connected to said second terminal from said transmission/reception unit to said address generation apparatus.